

## **REMARKS**

### **I. Status of the Claims**

Claims 1-35 and 72-89 are now pending in this application. Claims 36-71 and 90-121 are canceled herein without prejudice or disclaimer. Claims 1, 16, and 78 are amended herein to recite that the at least one first and the at least one second block are linked together via an intermediate block. Support for this amendment may be found throughout the specification and original claims, for example, on page 3, paragraph [014] of the specification as originally filed. As such, Applicants submit that no new matter has been added by these amendments.

### **II. Rejections Under 35 U.S.C. § 103(a)**

Claims 1-35 and 72-89 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,410,005 to Galleguillos et al. ("Galleguillos"), or U.S. Patent No. 6,663,855 to Frechet et al. ("Frechet '855"), or U.S. Patent No. 6,685,925 to Frechet et al. ("Frechet '925"), or JP 2002-201244. See Final Office Action at 3-6. Applicants respectfully disagree with these rejections as applied to the presently pending claims.

To prove a *prima facie* case of obviousness, the Office must show that the cited references would have provided to one of ordinary skill in the art some suggestion or motivation to combine or modify their teachings in an effort to achieve all of the limitations of the claimed invention, with a reasonable expectation of success (see MPEP § 2143). These criteria have not and cannot be met here with respect to the present claims.

In the Final Office Action, the Examiner asserts that because the present claims are not directed to a triblock polymer, “a linkage between any two blocks containing two monomers can read on the instant intermediate segment.” Final Office Action at 7. Applicants disagree. As amended above, the present claims, e.g., claim 1 now recite a block polymer having a polydispersity index of greater than 2 and comprising at least one first block and at least one second block linked together via an intermediate **block** comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block. The amendment to claim 1 merely clarifies what was already set forth at paragraph [0014] of page 3 of the as-filed specification: “The at least one intermediate segment **is a block** comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block. . . .” (Emphasis added).

Thus, Applicants respectfully submit that the cited references, alone or in combination, do not render the present claims obvious, as they do not teach or suggest all of the claim limitations of the amended claims. In particular, first, the references do not teach or suggest a block polymer as claimed, comprising an intermediate **block** comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block. Second, the references do not disclose or suggest a block polymer as claimed with a polydispersity index of greater than 2. Each of the cited references is discussed in more detail below.

Galleguillos

*Galleguillos* discloses a copolymer that “includes a polyacrylate backbone of hydrophobic blocks, with hydrophilic acrylate side chains.” See abstract. The different blocks are not held together by an “intermediate block comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block,” as claimed. Moreover, the disclosure does not mention the number average or weight average molecular weight for the block copolymer, much less the polydispersity index. Accordingly, *Galleguillos* cannot serve as a proper basis for an obviousness rejection and Applicants respectfully request that the Examiner withdraw this rejection.

Frechet '855 and '925

The *Frechet* references disclose block copolymers with “a core polymer having a backbone comprising at least a proportion of C-C bonds and two or more flanking polymers. Each flanking polymer is covalently bound to an end of the core polymer. . . .” See abstracts. There is no teaching of an intermediate block in the *Frechet* block copolymers, much less an “intermediate block comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block,” as claimed. Furthermore, while the Examiner asserts that the reference suggests “[a] molar ratio of the core polymer to the flanking polymer from 1:10 to 10:1” (Final Office Action at 5), Applicants note that this ratio has no correlation to the polydispersity index of the polymer. Indeed, the *Frechet* references nowhere disclose the polydispersity index of the described polymers. As

such, the *Frechet* references, either alone or in combination, do not teach or suggest each and every element of the claims and cannot serve as a proper basis for an obviousness rejection. Applicants respectfully request that the Examiner withdraw these rejections.

#### JP 2002-201244

JP 2002-201244 discloses “an acrylic block copolymer which comes to give 2 or more sets of monomer components of a different presentation.” JP 2002-201244 computer translation at paragraph [0013]. JP 2002-201244 does not teach that the at least two monomers have different glass transition temperatures, nor does it teach an “intermediate block comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block,” as presently claimed. Accordingly, JP 2002-201244 does not teach or suggest all elements of the presently pending claims and cannot serve as a proper basis for an obviousness rejection. As such, Applicants respectfully request that the Examiner withdraw this rejection and allow the claims.

### **III. Double Patenting Rejection**

The Examiner provisionally rejected claims 1-35 and 72-89 under the judicially created doctrine of obviousness-type double patenting as allegedly being “unpatentable over claims 1-101 of copending Application No. 10/670,388.” Final Office Action at 8. The Examiner also provisionally rejected claims 1-35 and 72-89 under the judicially created doctrine of obviousness-type double patenting as allegedly being “unpatentable

over claims 1, 4-31, and 43-102 of copending Application No. 11/089,210.” *Id.*

Applicants do not agree with these rejections; however, solely in an effort to expedite allowance of this application, Applicants submit herewith a Terminal Disclaimer over the ‘388 and ‘210 applications. As such, the obviousness-type double patenting rejections have been obviated and Applicants respectfully request that the rejections be withdrawn.

#### **IV. Conclusion**

Applicants respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-35 and 72-89 in condition for allowance.

Applicants submit that the proposed amendments do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

It is respectfully submitted that, in light of the Examiner’s Response to Arguments (see Final Office Action at 6-8), the entering of this Amendment would allow Applicants to reply to the final rejections and would place the application in condition for allowance. Furthermore, Applicants submit that entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, Applicants submit that the claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicants therefore request entry of this Amendment, the

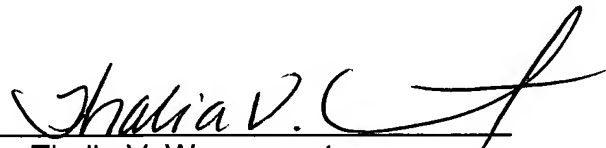
Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

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By:   
Thalia V. Warnement  
Reg. No. 39,064